

## M 4.1, 35 km NW of Toyah, Texas

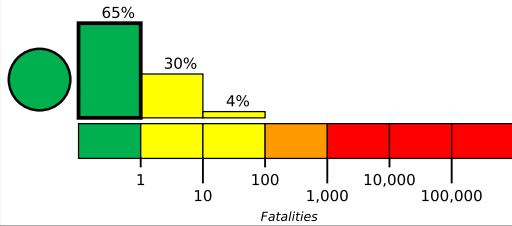
Origin Time: 2021-12-16 12:25:24 UTC (Thu 06:25:24 local)  
Location: 31.5535° N 104.0252° W Depth: 5.0 km

Created: 2 hours, 4 minutes after earthquake

### Estimated Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.

### Estimated Economic Losses

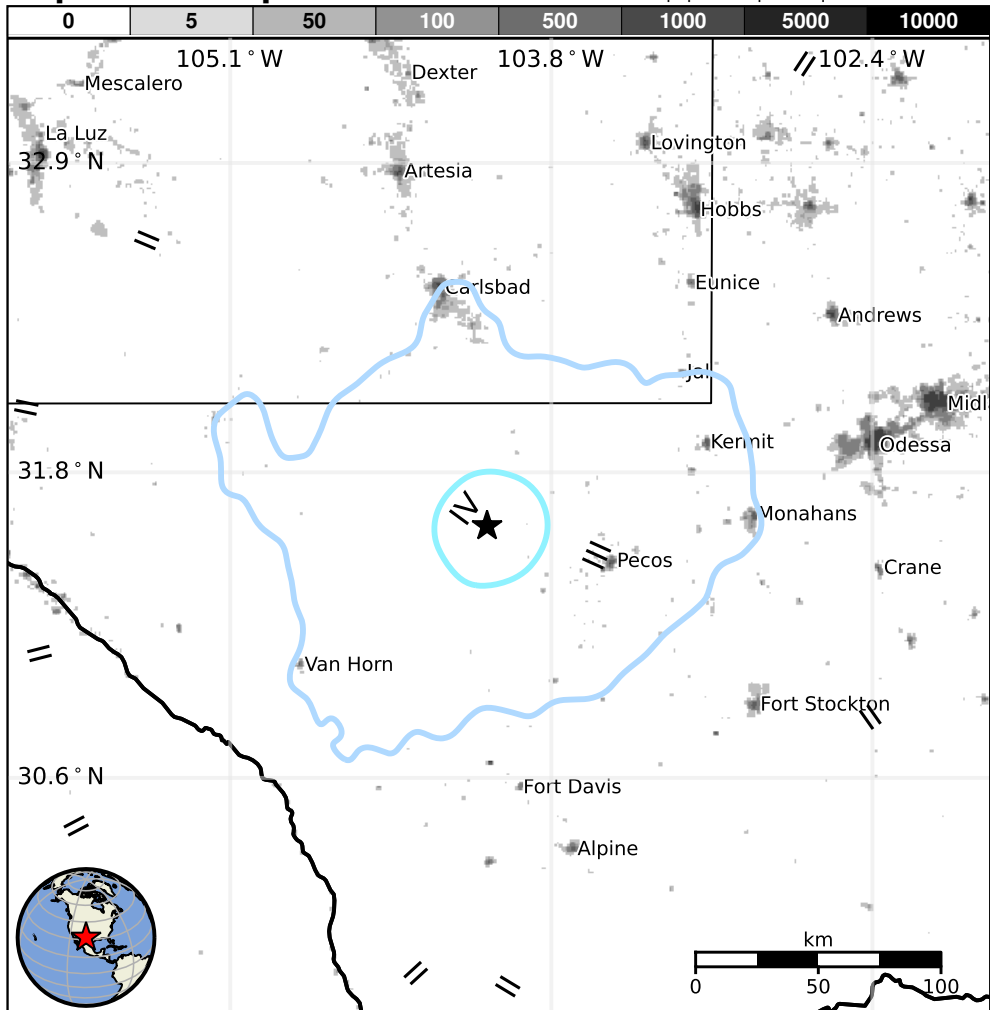


### Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)	—*	714k	0	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy

\*Estimated exposure only includes population within the map area.

### Population Exposure



### Structures

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are unreinforced brick masonry and reinforced masonry construction.

### Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1978-06-16	347	5.3	IV(18k)	—
1992-01-02	123	5.0	V(4k)	—
1995-04-14	155	5.7	V(7k)	0

### Selected City Exposure

from GeoNames.org

MMI	City	Population
III	Mentone	0
III	Pecos	9k
III	Loving	1k
III	Kermit	6k
III	Van Horn	2k
III	Carlsbad	26k
II	West Odessa	23k
II	Odessa	100k
II	Hobbs	34k
II	Midland	111k
II	Alamogordo	30k

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

<https://earthquake.usgs.gov/earthquakes/eventpage/tx2021yope#pager>

bold cities appear on map.

(k = x1000)

Event ID: tx2021yope